

Topic

3

PSBA STUDENT DELEGATE PROGRAM

Hot Topic Background Information

Technology in School:

Bring your own device

Bring your own device

Two years ago, the School Board adopted a policy related to students and their personal electronic devices (including cell phones) while in school and at school-sponsored activities. Your group will be looking at the policy and recommending changes to the policy as you see fit.

In reviewing the policy, the group should make any changes necessary and consider adding/addressing the following:

- Whether additional definitions/examples need to be added to make the policy clearer.
- Whether students should be required/allowed to use district WiFi or personal wireless data provider.
- If personal devices are going to be used as part of the educational program, consider students that may not be able to afford their own device or that may forget their device at home.



Myths and misperceptions

There are many assumptions around BYOD, so deeper thinking is required to ensure that the full implications of various deployment models in a school environment are understood.

When evaluating BYOD it's important to depart from a pedagogical perspective. A good start is to consider the three core principles of successful 1-to-1 learning programs:

- Any investment in devices must be aligned with an investment in professional development.
- The initiative must be scalable.
- The initiative must be sustainable. This normally includes making sure those who benefit from the initiative make a co-contribution.

Some of the key myths around BYOD programs go against these principles and their core underpinning, which is equity of access for all students.

Myth 1: BYOD is always financially sustainable.

In pursuing their vision of 1 to 1, many schools relied on grants and government largesse as sole sources of funding. In this case, changing government priorities means the funding often stops, and, potentially, so does the 1-to-1 initiative.

A family co-contribution, on the other hand, provides ongoing support. It need not be onerous, and gives students and their families a sense of ownership of the program while leaving the decision of selecting an appropriate pedagogical tool in the hands of the educators.

Although many schools worried about asking families to contribute, BYOD models are frequently based on a 100% contribution by families, which may not be either sustainable or reasonable. There is often a case raised by the school community that says schools or governments should not ask parents to contribute to the cost of public education. Indeed, in some Nordic countries it is illegal.

Myth 2: BYOD is cheaper.

Although BYOD may seem, on the surface, to save money, does it really? Network, security and technology management become more complex with widely different devices. The greater the complexity, the greater the costs for support. In fact, in talking to schools in Australia who have moved to BYOD, Microsoft has heard that some have found the total cost of ownership for BYOD models is 25-30% higher than before – though this is hidden by moving some of the costs to parents. If the school absolves itself of responsibility then students may not be able to participate in class.

Professional development remains a priority no matter how the technology is provided, and requires ongoing investment. What additional forms of professional learning are required when there's a more challenging multi-device environment?

Myth 3. Just get the devices in their hands.

The myth is that today's students intuitively know how to use technology for learning. Schools that implement student-choice BYOD with this belief in mind often:

- Fail to envisage what constitutes great, technology-rich learning.
- Base their programs on technology rather than true pedagogical transformation.

Although it is true that many students are comfortable with technology and not timid about trying new applications, this does not mean they know how to find the most pedagogically appropriate technology tools. It is the job of educators to provide this type of guidance and support, and this job is made more difficult when there is a range of devices with diverse capabilities.

In many ways, student-choice BYOD and the technical problems it creates can be a classroom distraction rather than a pedagogical benefit.



To BYOD or not to BYOD?

Choosing a school provision model requires a responsible and thorough examination of the broader issues that experienced schools have addressed in order to implement successful 1-to-1 learning programs.

The following questions can help to establish the preconditions for BYOD programs and sharpen focus on readiness, planning, and specific implementation procedures.

Readiness

1. Does your school have a high level of expertise, resources and budget to effectively manage a variety of technologies across a variety of platforms and devices?

Managing a variety of platforms and devices is more difficult and time-consuming than managing a regular 1-to-1 learning program.

If you do not have the expertise, resources and budget to effectively manage a variety of technologies across a variety of platforms it is imprudent to embark on a student-choice BYOD model.

2. Does your funding model ensure equity for all students?

The basic foundation on which 1-to-1 learning was established was equity and universal access. In fact, if the initial concept of 1-to-1 learning had simply been built around the idea of allowing any student fortunate enough to have a laptop at home to bring it to school, (BYOD if you have one), the idea would have joined the exceptionally long list of failed educational innovations.

There is an assumption today that BYOD means every student will have some type of technology to use at school. The inference here is that schools can use the money they save not buying laptops to provide devices for any students who do not own them. This requires having options in place to avoid the creation of a digital divide within the classroom. These initiatives require strong visionary leadership. The financial challenge of implementing a 1-to-1 learning program can be daunting, but schools should be very wary of seemingly easy answers that do not serve the interests of all their students.

3. Does your BYOD program ensure that all students have access to devices and software that provides the same level of functionality?

Successful 1-to-1 learning programs are based on the principle that any software application used within a school had to provide the same level of functionality not just for the affluent, gifted or financially challenged, but for every single student.

4. Are your teachers comfortable and confident about managing a technology rich and diverse classroom?

Even the most competent and technologically literate teacher would prefer to teach without the distraction of explaining how to do the same thing across multiple devices. Clearly, a move to a mixed environment can add an extra level of complexity.

The ability to scale the development of confident users of technology across whole school staffs has, to date, been a major weak point. Too often attention is focused on the 'innovators' – those who are very comfortable with technology – rather than working with the true transformers.

These are teachers who will want simplicity and focus on pedagogy. These are the teachers who should be nurtured at all costs, for they ultimately are the ones who will bring whole schools on board. They do not want or need the distraction of figuring out whose machine can do what, or whether or not a needed application will run on a diverse range of computer models, platforms, and device forms within their classrooms.

5. Does your school support all aspects of self-directed learning, giving students a voice in how, what and when they learn and not just in the choice of a device?

If the rationale for a BYOD initiative is to support the concept that students should be able to select the digital tools they will use for their learning, there needs to also be some alignment within the school vision and mission about who makes the decisions around what, when and how the students learn.

If the vision includes assigning responsibility for such matters to students, in a truly self-directed manner, then there would be a case for having students choose their own device.

However, caution needs to be exercised to ensure that selection is based on pedagogical support rather than other uses (to listen to music or use as a phone) and, most importantly, price.

Planning

BYOD may be seen as a way to shift the cost of 1-to-1 learning to parents. However, it is beneficial to reflect on the following to ensure the decision is being made in the best interests of the students, and that it fits with your school's vision and goals.

1. How do you develop criteria to clearly define your student's personal computer requirements?

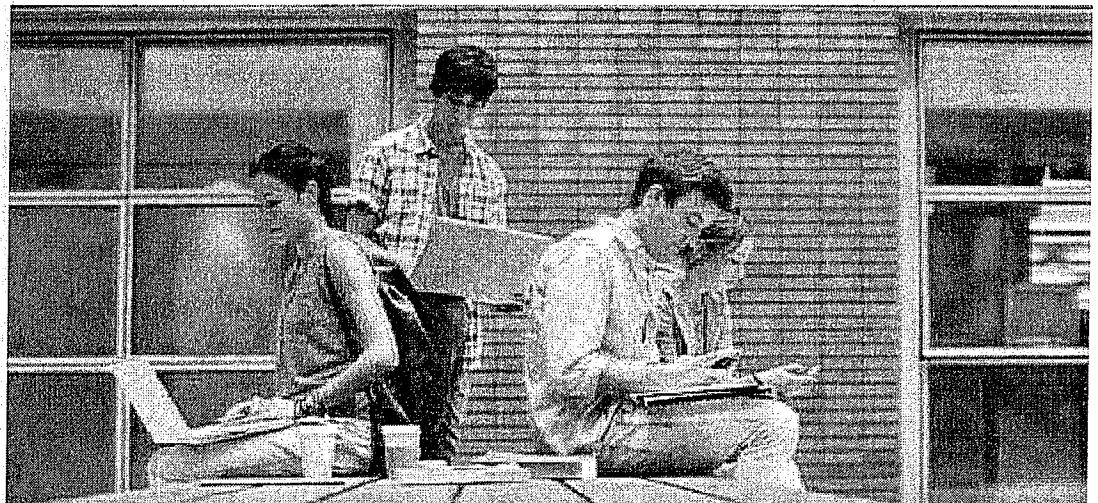
BYOD should not be based on the myth that any device is appropriate as long as it puts the power of the Internet and digital learning into each student's hands.

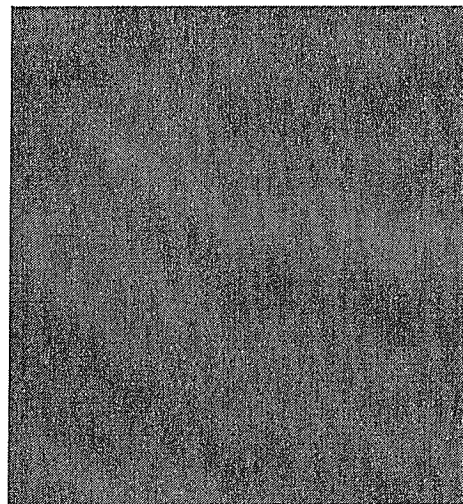
The decision about which model, which make, even which platform to buy is never easy. Indeed, with the number of large-scale countrywide and school-based programs, product assessment is becoming a science in itself. It is important to build a robust process around this decision and establish strict criteria based on what will best meet the pedagogical needs of students and teachers over the ensuing three or four years so that students have the best possible devices.

Although there is no doubt that cost is important, the experiences of schools around the world over the last two decades has shown that cost should not be the major reason a model, platform, or device type is chosen. A less expensive device that does not meet the learning needs of students or provide support for the teaching practices within a school wastes valuable financial resources and, in the long term, is more costly.

What should never happen is that teaching practice be determined based on the functionality of the least powerful BYOD device in a classroom.

After criteria based on learning and teaching needs, the most important criteria for device selection has been service turnaround and machine reliability and usability. Equally important is being able to assess a supplier's ability to meet SLAs for the life of the selected device.





2. How have you communicated your vision to stakeholders and involved them in the planning process?

If your stakeholders do not know or understand your vision of the learning opportunities 1-to-1 learning makes possible, they may believe any device will be appropriate for learning and not provide the strong support you need.

Therefore, the engagement of stakeholders is essential, not only with an eye to potential funding support or added technical expertise, but also to ensure that the 1-to-1 learning program is supported and owned by the whole school community. Without this, there is the likelihood of friction and scepticism, and an emphasis on cost rather than outcomes.

All communications to parents must fully outline the provision model, the rationale, benefits and the advantages it provides all students. A communication plan must include frequent communiqués to parents and community members, that anticipate parental concerns, respond to questions, and provide opportunities for stakeholders to witness the 1-to-1 initiative in action to understand the pedagogical value of the decisions made.

Implementation Procedures

The need for, and design of, implementation procedures is more complicated when implementing a BYOD initiative because lines of responsibility are less clearly delineated. Therefore, it's useful to consider the following procedures and policy questions first.

1. Who is responsible for maintenance of student devices?

Student-choice BYOD programs are often sold on the apparent advantage that responsibility for laptop or device maintenance moves from the school to the students and their parents. However, this assumption warrants deeper analysis.

A good starting point is to establish what the standard process will be for students having their laptops repaired, and if a 'standard' school policy can actually be enforced when responsibility for upkeep lies outside the school.

Successful 1-to-1 initiatives have always been built around service level agreements (SLAs) that meet rigorous key performance indicators, such as a turnaround of 95% of repairs in 24 hours. They also include contingency plans, usually loan devices that are swapped on premise to rapidly get students up and running. These kind of agreements will be harder to establish and enforce without the collective bargaining power of whole school agreements.

If an organised maintenance plan cannot be established then, inevitably, there will always be a percentage of students who cannot participate fully because their device is under repair, lost or malfunctioning, making classroom management challenging.

2. Who determines device life cycles?

Device life cycles are also an important consideration. While three- or four-year rollovers are standard in most school-based programs, it's difficult to enforce upgrades under a student choice BYOD plan. The challenge becomes teaching across different generations of technology and feature sets. Teachers are placed in the unenviable position of trying to leverage contemporary technology, without excluding students who don't have it.

3. How will you manage Help Desks and in-house support services?

Experience shows that a well-run Help Desk is central to the smooth running of a 1-to-1 learning initiative. This is because 60-70% of all problems tend to be software, rather than hardware related, making a help desk an important first base.

In a student-chosen BYOD environment, the role of the Help Desk is vastly expanded to cater for multiple devices and operating systems. Student-manned Help Desks can be a practical solution, but it's important to ensure that processes and systems are in place so that support can be provided promptly and efficiently.

4. Re-imaging, viruses, security

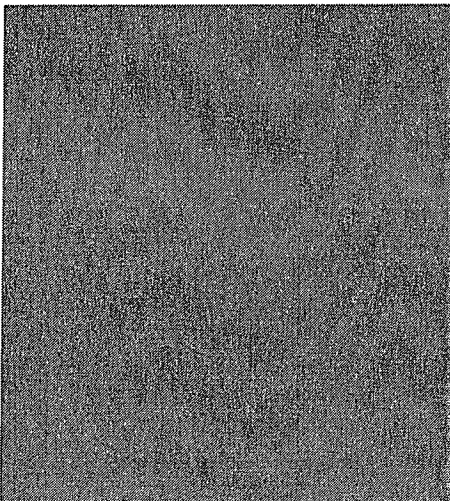
In a student-chosen BYOD environment image recovery, which, in a school-managed environment is embedded in the school management systems, becomes challenging. It is the same for security authentication and virus protection for devices that will connect to (and potentially infect) school networks.

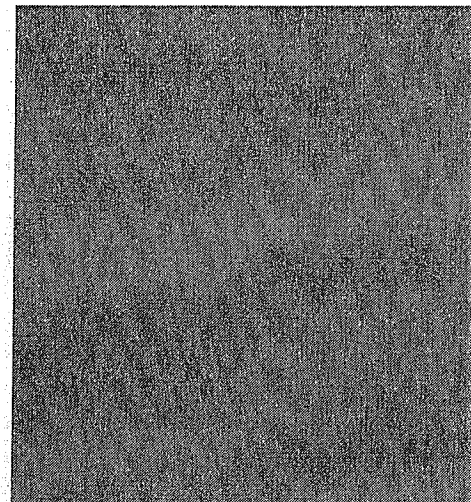
Within any provision model, it is important to assign responsibility for managing compatibilities, images, viruses and security. Whether this be the student manned Help Desk, the manufacturer, the service agent or students, what matters is that there is clarity in understanding who is managing these matters.

5. Will extras, such as extended warranty and insurance, be mandated or optional?

Experience tells us that in a school environment a percentage of student laptops and other devices will inevitably be dropped or knocked – and break. When that happens, the student needs to know the device can be repaired immediately, without any discussion about insurance assessment, or argument about whether the damage was intentional, or without any demarcation at any point between the insurance company, the manufacturer warranty provider, and the repairer, as too often happens on individual claims.

Therefore devices within any 1-to-1 initiative need to be covered by full warranty and insurance for the full term that they will be used at school.





Warranty management can be similarly challenging. Many laptops are sold in retail with a one-year warranty, and extra years can be expensive. For a four-year cycle, a fourth year warranty can be prohibitively expensive at retail, and it is often only the weight of numbers in a school-based program that makes the pricing viable.

6. How will you manage software licensing?

In recent times the availability and cost of software applications has changed dramatically. With the advent of Web apps, plug-ins, and so on, there are a large number of applications that can be obtained for little or no cost. Issues around affordable licensing for 1-to-1 learning programs have largely been resolved.

Microsoft licensing schemes offer a number of ways to license students for the core software they use – including Windows® and Microsoft® Office – even on their own devices.

However, there are still specialist applications such as virus protection or those focused on specific subject areas such as Mathematics, Music and Science, that may require school licensing. Schools need to ensure that school software is covered for home and school use and updated regularly.

Finally, there is the matter of cost. Be wary of some of the sometimes misleading claims associated with 'freemiumware', as the trade-off for 'free' is often associated with some form of advertising, which in itself raises ethical issues that should be thought through and be in line with school policy.

7. Can school policy still dictate what is on students' devices and how they are used?

With school-based 1-to-1 learning programs, policies around personal use are the responsibility of the school. With student-choice BYOD, it is usually not so clear. In fact, the assumption often is that if parents or students choose and buy the device, they are free to determine what is installed on it and when and how they use it.

Well before you initiate your 1-to-1 learning program, therefore, it's important to develop a clear policy for your school in conjunction with parents and students. This should be reviewed at least annually and widely communicated. It should also cover a wide range of areas relating to the effective use of the students' laptops, including:

- Will laptop insurance be mandatory or optional? Will it cover the device at home, at school?
- Who will define and/or review the data limit for downloading versus purchasing more credit?
- What is the process for reporting lost and stolen devices?
- Should Web 2.0: Facebook, Twitter, and so on be allowed, restricted or banned? Why?
- What is the school's personal software policy?
- Who is responsible for ensuring batteries are fully charged, and are there any options if they are not?
- What is the process when devices are left at home?
- What is the process for virus protection / removal (cost of re-imaging)?
- Who is responsible for secure storage?

MAKING PROGRESS:

Rethinking State and School District Policies Concerning Mobile Technologies and Social Media



BACKGROUND



It is commonly recognized that our nation's progress depends on improving learning, thereby creating healthier communities and a stronger workforce. In today's world, that requires us to take advantage of new learning tools to ensure that our children's learning is practical and prepares them for the challenges of the 21st century. The advantages of digital media now greatly outweigh the disadvantages and require that schools update their thinking and policies to provide guidance on the use of these tools to improve student learning and achievement.

In 2000, when the Children's Internet Protection Act (CIPA) was first enacted, the major concern on the part of legislators and education policymakers was to protect children from viewing pornography on the Internet. A decade later, the nature and scope of digital media differs sharply from what existed in 2000. Mobile devices, social media, and other Web 2.0 applications have become mainstream in many sectors of society, and an increasing number of educators are demonstrating the power of these applications to enrich the learning environments in their classrooms.

There is a growing recognition on the part of teachers, education support professionals, school administrators, and prominent educational experts that emerging digital technologies are here to stay and, when used properly, can offer substantial educational benefits. These benefits, however, are not without some risks. Recent abuses of social media have prompted a number of state legislatures and boards of education to consider enacting legislation or policies to respond to concerns about the use of digital media to harass, bully, or make inappropriate sexual contact with children. **Before steps are taken to impose limits on the use of social media and mobile technologies in schools, policymakers and educators need to consider the consequences for learning that such restrictions would produce.** In this document, we argue that such action should carefully consider the advantages of social media for learning and that these guidelines for responsible use bring media into mentored environments where they can be safely explored and shared.

Many of the problems raised by these new technologies – from bullying to engaging in risky behavior – are not new to the public discourse, but are merely being delivered in different media. The challenge to responsible educators remains the same: to provide stimulating and safe learning environments that support the acquisition of practical skills necessary for full participation as a 21st-century citizen. Achieving this without mentored use of new technologies seems both impractical and counterproductive. **One of the most powerful reasons to permit the use of social media and mobile devices in the classroom is to provide an opportunity for students to learn about their use in a supervised environment that emphasizes the development of attitudes and skills that will help keep them safe outside of school.** A popular analogy is to driver's education, where behind-the-wheel training is as important as the more theoretical study of the "rules of the road." To advance thinking about the issues involved, we offer a summary of the emerging themes in educational uses of social media and conclude with recommendations for responsible use policies.

PURPOSE OF THIS DOCUMENT

In December 2011, the Consortium for School Networking (CoSN) and the FrameWorks Institute invited senior-level representatives from state and national organizations to a meeting in Washington, D.C., that was supported by a grant from the MacArthur-UCHRI Digital Media and Learning Research Hub at the University of California, Irvine. The goal of the workshop was to develop a resource to assist educational leaders and policymakers in developing sound and practical policies for our increasingly connected learning environment. This document, which resulted from the workshop, is not intended as a prescriptive policy statement; *rather, its purpose is to help inform policymakers and educators as they develop or reconsider policies addressing new digital media in the context of improved learning.*

SOCIAL MEDIA AND MOBILE TECHNOLOGIES DEFINED

Social media is defined as the set of applications for digital devices that enable the creation and exchange of user-generated content. The most widely used social media applications today are Facebook and Twitter, but there are hundreds of other specialized versions. For example, Biomed Experts is used by scientists and Sermo by physicians to collaborate and exchange information. A large number of social media applications exist especially for younger users – including preteen consumer networks such as Kidswirl, Togetherville, and Imbee. The education-oriented Edmodo, Gagggle, and many others are designed especially for K–12 schools.

Mobile technologies are devices with Internet connectivity that can be held easily in one's hand. Examples include iOS and Android smart phones, tablets such as the iPad or Samsung Galaxy, and e-readers such as Kindle Fire or Nook.

CRITICAL OBSERVATIONS

1. The use of mobile Internet devices and social media by young people is widely prevalent. The use of student-owned mobile devices for classroom instruction is growing, and more schools are moving from policies that ban their use to integrating them in the classroom.

Workshop participants believed that the following observations are particularly relevant to state and local decision-makers as they consider policy pertaining to social media and mobile technologies in K–12 schools.

According to recent surveys by the Pew Research Center Internet & American Life Project, 95 percent of all teens (ages 12–17) use the Internet on a regular basis, 80 percent of them use social networking sites, and 75 percent have cell phones. With these numbers growing steadily, Internet and cell phone access by young people in their lives outside of school is rapidly approaching the point at which it might be viewed as nearly universal.

What about school use? According to research done by the Pew Internet & American Life Project, the majority of students report that they are able to bring their cell phones to school but must keep them off when they are in class. This policy environment appears to be changing. Although exact figures are lacking, it is clear that the number of school districts that permit students to use their own mobile devices in the classroom is rising steadily. The growing popularity of “bring your own technology” (BYOT) programs is fueled, in part, by the idea that allowing student-owned devices to supplement school-purchased technology can help cut costs in these financially tight times and, in part, by the realization that learning can benefit from technology when students are mentored in appropriate applications. By taking advantage of student interest in technology, schools stand to benefit from more teachable moments in and out the classroom and to support and create personalized learning that is guided by teachers and peers.



2. Students and schools experience substantial educational benefits through the use of mobile devices and social media.

As technology improves and expanded availability make the use of mobile devices and social media in the classroom increasingly viable, many K–12 educators are embracing the new teaching and learning opportunities that result. Among other things, these technologies allow students to:

- Bridge the gap between formal (in-school) and informal (out-of-school) learning, improving their preparation for real world experience;
- Construct their own learning environments to help them achieve academically and acquire the skills necessary for the 21st century; Connect instantly with peers, experts, and information resources beyond the school walls;
- Provide real-time feedback, exchange information, and receive assessments during classroom instruction through a text message or Twitter “back channel”;
- Document their work through images taken on and off campus;
- Receive and submit homework assignments digitally;
- Learn how to utilize mobile devices and social networking as tools for lifelong learning.

Examples: [Institute of Play](#), [Project Based-Learning](#), [The Hive Learning Network NYC](#), [SMALlab Learning](#), [Conservation Connection](#), [Digital Youth Network](#).

3. Current federal, state, and local policies and procedures need modification or clarification in order to respond to current realities.

If schools are to realize the advantages that social media bring to the field of learning and to update their curricula appropriately, more practical guidelines must be developed. The Children’s Internet Protection Act (CIPA) is never far from the minds of K–12 leaders as they attempt to revise policies and make decisions regarding the educational use of social media and mobile devices. Until recently, CIPA was viewed as severely limiting the use of these technologies by schools that are supported in any way through E-rate funding. Requests from a number of parties led to a recent revision by the FCC, which administers the E-rate. In August 2011, the FCC issued a [Report and Order](#) that included the following language: Although it is possible that certain individual Facebook or MySpace pages could potentially contain material harmful to minors, we do not find that these websites are per se “harmful to minors” or fall into one of the categories that schools and libraries must block. The FCC revision did not address the [request from the U.S. Department of Education](#), as part of its National Education Technology Plan, that E-rate provisions and CIPA requirements should be clarified and barriers to student-owned devices in schools removed, but did promise to return to that topic at a future time.

The FCC order also strengthened earlier language and requirements for schools receiving E-rate funding to show that they have in place an Internet safety program that educates minors about *appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, as well as cyberbullying awareness and response*. This education program must be in place by July 2012. Thus, schools have a legal responsibility and ethical opportunity to implement processes and programs to instill good habits of technology use in students.



4. There are legitimate concerns about the use of social media that need to be addressed.

Even ardent supporters of social networking and mobile devices in school would agree that it is important to have an awareness of – and plans to prevent and/or deal with – negative behaviors that can be facilitated by such technologies. These include:

- **Sexting:** Sexting involves sending sexually explicit messages or photographs, primarily between mobile phones. According to the Pew Internet & American Life Project's [Teens and Digital Citizenship survey](#), 16 percent of teens 12–17 have received sexually suggestive nude or nearly nude photos or videos of someone else they know. While a relatively small number of young people are involved, sexting can be a serious problem for those sending and receiving such messages.
- **Cyberbullying and harassment:** Some of the highest-profile problems with social media in recent years have involved the use of the technology by students to bully or harass their peers. As with sexting, the overall numbers are not huge, but 20 percent of all teens and 33 percent of younger teenage girls told Pew researchers that peers are mostly “unkind” to one another at social networking sites. These statistics are disturbing, as is the fact that 19 percent of teens report that they have been bullied in the last 12 months – in person, by phone, via text messaging, or online. It is worth noting, however, that the number one form of bullying does not involve technology; 12 percent of the teen respondents said they had been bullied in person, while 9 percent endured bullying via text messaging, 8 percent online (through email, social networking, and so on), and 7 percent over the phone.
- **Inappropriate behavior, compounded by a lack of guidance from the school system,** is likely to have negative consequences, regardless of the venue in which it occurs. Technology is no exception. The rules we make to structure appropriate interactions need to recognize the shared responsibility that all adults in a young person's life must assume. Accountability for addressing such behaviors should include but not be limited to social media.
- **Poor judgment by youth about how much to share online:** Young people can find themselves making unwise decisions about what to share given their inexperience and naivety. Without an awareness of privacy issues, young people risk providing photos or information about themselves that could harm them, their reputations, or future opportunities. It is important to recognize the risk of providing an opening for predators looking to make contact for harmful purposes. Responsible use of social media requires young people to recognize and protect themselves from such dangers. This problem largely lies outside of school, rather than in it, but educators and policymakers need to identify strategies to help students and parents minimize risk and recognize the limits they must place on themselves when acting in these public forums.

5. Equity is a vital issue to consider when establishing policy around social media and mobile technologies.



As we move forward with the latest technologies, we must keep sight of the crucial issue of digital equity. It is important to consider the availability of loaner equipment and school-owned devices that are accessible to lower-income students in a stigma-free manner. BYOT implementations have the potential to increase the digital divide that earlier one-to-one initiatives were designed to narrow. Furthermore, digital equity issues are not limited to the devices students have access to, but also touch on ways of making Internet access and adequate bandwidth available to all students – at school and at home. Failure to address this will create a critical fault line in the differential learning opportunities available to students and, potentially, leave some groups of students ill prepared to join our country's 21st-century workforce.

SUGGESTIONS

Compliance with CIPA and E-rate guidelines is essential to schools, of course, but it is also clear that much of the responsibility for defining acceptable use, and setting policy that is both appropriate for today's technology-enhanced learning environment and sufficiently flexible to respond to tomorrow's developments, remains with states and individual districts. Some suggestions to policymakers as they navigate these waters:

- **Banning is not the answer:** Until recently, many districts have banned the use of social networking sites such as Facebook. As schools across the country have begun reconsidering their policies and opening the doors to social media, a few high-profile cases with negative consequences have prompted states to consider imposing statewide bans. So far, such efforts have been met with resistance and have led to efforts to find a more balanced approach. In Missouri, for example, certain provisions of a newly enacted law that barred teachers from having contact with students through social media sites were blocked by the courts and then repealed through the governor's initiative. Rhode Island's "Safe School Act," which was originally opposed by educators and community members who had been told it would impose a ban on social networking in schools, eventually passed with no such provision. Instead, according to eSchool News, the bill's author said that the Safe School Act, which focused primarily on the issue of cyberbullying, was intended to *encourage [social media use] for educational purposes*. Policymakers in both states, much like the FCC through its guideline changes described earlier, shifted focus from an attempt to establish centralized rules to a requirement that individual districts set their own policies regarding social networking and other technology use.
- **Rethink and revise the district AUP (Acceptable Use Policy):** Many school districts are moving in the direction suggested by the shift described above: dropping the bans and, instead, focusing on policy goals that go beyond the narrow set of website access issues that were the primary focus of many earlier AUPs. One example is the Guidelines for the [Prevention of Sexual Misconduct and Abuse in Virginia Public Schools](#), shared by presenters at the Washington, D.C., workshop. CoSN's Jim Bosco and Keith Krueger proposed in a recent [Education Week](#) commentary that school systems should move beyond the traditional AUP approach – which has students and family members sign a form “accepting” certain rules, with little action required after that – to a “responsible-use policy” (RUP) that emphasizes education and *treats the student as a person responsible for ethical and healthy use of the Internet and mobile devices. Staff, too, should be signatories of such responsible-use policies.*
- **Take the opportunity to educate students:** The new FCC E-rate requirements outlined in the August 2011 Report and Order reinforce what many educators already believe is the key to online safety and security: adequate student education. In fact, some would argue that one of the most powerful reasons to permit the use of social media and mobile devices in the classroom is to provide an opportunity for students to learn about their use in a supervised environment that emphasizes the development of attitudes and skills that will help keep them safe outside of school. A number of schools across the nation, as well as some organizations, have developed programs on digital literacy and safe Internet use to help students learn how to use social media and other Internet content in a safe, effective, and appropriate way.



• **Emphasize professional development:** Professional development for all stakeholder groups is key to the effective support of social media and mobile technologies in the classroom. Today's technology-related professional development must emphasize not only technology integration and continuous improvement, but also the ethical, legal, and practical issues related to social networking and mobile devices in the classroom. Professional development must explore effective activities and approaches for conveying this information to students.

MAKING PROGRESS

Mobile Internet technologies and social media present new challenges and powerful learning opportunities for K–12 students and educators. No era in history has come close to the quality and volume of learning resources that are at our fingertips. Informed leadership from all key stakeholders is required to seize the learning opportunities while minimizing the risks. This document is offered as a resource for doing so.

This document was possible through an award from the MacArthur-UCHRI Digital Media and Learning Research Hub at the University of California, Irvine.



REAL-WORLD SNAPSHOTS

Bring Your Own Technology (BYOT)

Fairfax County Public Schools

Falls Church, Virginia

Fairfax County

Number of Students: 176,138

Percentage of free/reduced lunch: 26.18%

This district is bringing transformation to new levels for their students and staff. Schools are pioneering several innovative programs, including eTextbooks and a comprehensive system of delivering digital curricular resources. Staff's extensive use of social and digital media speaks to the open culture that district policies and practices have built.

In Fairfax County Public Schools, the use of student-owned computing devices is an institutional imperative endorsed by the Superintendent and School Board. Implementation of BYOT across the school district began with various pilot projects. From these experiences a solution was designed, which led to the following changes:

- Network enhancements were implemented, in particular to the wireless infrastructure;
- Policies such as the Student Acceptable Use Policy (AUP) were updated;
- Technical bulletins were created to define procedures for using privately owned computing devices;
- Best practices were distributed; procedures and accompanying contract vehicles were established for purchasing devices for those in need;
- An Ideal Use Matrix was created to help school leaders make informed decisions on how to integrate student-owned devices into each school's instructional priorities.

FCPS encourages the use of social media for instructional purposes and provides Web 2.0 tools within a secure environment for K–12 students and for all teachers and administrative staff. Through FCPS 24-7 Learning, the Blackboard learning management system, Wikis, podcasts, and blogs are available to incorporate into instruction. An additional capability is the ability to search FCPS-created Web 2.0 content. Through FCPS Google Apps for Education, students, faculty, and staff have the ability to communicate, store files, and collaborate on documents, spreadsheets, and presentations in real time from school, work, or home, all within a secure “closed campus” online environment.



REAL-WORLD SNAPSHOTS

Trust and Participation

[New Canaan Public Schools](#)

New Canaan, Connecticut
Fairfield County
Number of Students: 4,076

One of the reasons for moving many curriculum activities online and “onto the cloud” in Connecticut’s New Canaan Schools was a logistical one: it helped create an “anytime, anywhere, anyhow” environment.

As a result, teachers can post assignments and students can work on them at night – alone or as a group. Teachers can monitor student progress on projects or edit student writing from home. “The use of social networking and other Web 2.0 tools has enabled a collaborative culture for teachers and administrators,” says Rob Miller, director of technology. Using tools such as Diigo, Google Earth, and Google Docs, students collaborate on projects across the curriculum. For example, before reading the book *Night* by Holocaust survivor Elie Wiesel, students worked in groups to research and create a Google Earth “stop” for each location in the story so that classmates had easy access to important information as they read. Students are often grouped with peers in classes other than their own. “They find it challenging to work with online partners and peers they hardly know,” says Cathy Swan, technology integration specialist, “but they’re adjusting and developing important skills. Teachers, too, are collaborating online. It’s truly a 21st-century workplace model.”

According to the New Canaan administrators, online safety issues are not about blocking, they’re about safety education – which begins in second grade with help from i-SAFE curriculum materials, modified for local use. By high school, safety and acceptable use discussions are incorporated into every single online project.

“Every time they get ready to post something online,” Swan says, “we talk about what they’re sharing and what permissions they’re going to include. We remind the students that what they put on the Internet doesn’t stay there.”

“Parents support our decision to open our network to social networking and Web 2.0 applications,” adds Miller, who frequently attends meetings to educate parents and keep them informed. “They are delighted and relieved that we are taking their kids to these sites and teaching them the responsible, ethical, safe, and legal way to use them.”



RESOURCE DIRECTORY

Social Media and Mobile Technologies in Schools

- Enews (July 10, 2008). Educational benefits of social networking sites.
Retrieved from http://www1.umn.edu/news/features/2008f/UR_191308_REGION1.html
- Ferriter, W., Ramsden, J., Sheninger, E. (2011). Communicating and Connecting with Social Media. NAESP.
- FrameWorks Institute. Digital Media and Learning.
Retrieved from <http://www.frameworksinstitute.org/digitalmedia.html>
- FrameWorks Institute. How Americans Think about Digital Media and Learning (video).
Retrieved from <http://www.frameworksinstitute.org/index.php?id=224>
- Kendall-Taylor, N., Lindland, E., Mikulak, A. Faster and Fancier Books: Mapping the Gaps Between Expert and Public Understandings of Digital Media and Learning. FrameWorks Institute.
Retrieved from <http://www.frameworksinstitute.org/index.php?id=224>
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., Rainie, L. (November 9, 2011). Teens, kindness and cruelty on social network sites.
Retrieved from <http://www.pewinternet.org/Reports/2011/Teens-and-social-media/Methodology.aspx?view=all>
- NASSP. Using Mobile and Social Technologies in Schools.
Retrieved from http://www.nassp.org/Content.aspx?topic=Using_Mobile_and_Social_Technologies_in_Schools
- Rogers, K. (2011). Mobile Learning. NAESP.

Benefits of BYOT

- Forsyth County Schools, Ga. (video).
Retrieved from <https://fcschoolsga.eduvision.tv/default.aspx?q=3SfVi13w17SmZEIpTemLWg%3D%3D>
- New Canaan Public Schools, Conn. (video). Retrieved from <http://www.youtube.com/watch?v=0Pag2ikpG38>
- Quillen, A. (October 15, 2010). Schools Open Doors to Students' Mobile Devices. Education Week, Digital Directions. Retrieved from <http://www.edweek.org/dd/articles/2010/10/20/01mobile.h04.html>
- Quillen, A. (October 17, 2011). Districts Tackle Questions Surrounding BYOT Policy (Article). Education Week, Digital Directions. Retrieved from <http://www.edweek.org/dd/articles/2011/10/19/01byot.h05.html>

Technical Issues

- U.S. Department of Education. Unpacking the Challenge.
Retrieved from <http://www.ed.gov/technology/netp-2010/unpacking-challenge>
- Wegner, P. (November 19, 2010). How School Wireless Networks CAN support student owned mobile devices. Secure Edge Networks. Retrieved from <http://www.securedgenetworks.com/secure-edge-networks-blog/bid/50000/How-School-Wireless-Networks-CAN-support-student-owned-mobile-devices>

Examples of Acceptable/Responsible Use Policies

- Bosco, J. (February 2011). Acceptable Use Policies in the Web 2.0 and Mobile Era, CoSN.
Retrieved from <http://www.cosn.org/Initiatives/ParticipatoryLearning/Web20MobileAUPGuide/tabid/8139/Default.aspx>
- Bosco, J., Krueger, K. (July 20, 2011). Moving from "Acceptable" to "Responsible" Use in a Web 2.0 World (commentary). Education Week. Retrieved from <http://www.edweek.org/ew/articles/2011/07/20/37bosco.h30.html?tkn=MYSFJgUVhy4kLgyFyf1UVVAqG141KG%2FUGxI.2&print=1>
- Maine Learning Technology Initiative. Professional Development: teachers involved in 1:1.
Retrieved from <http://maine121.org/>
- New Canaan Public Schools. Information and Communications Technologies, Acceptable Use Policies Guidelines.
Retrieved from <http://www2.newcanaan.k12.ct.us/education/page/download>

Government Laws, Guidelines, and Programs

- FCC. Guide to the Children's Internet Protection Act.
Retrieved from <http://www.fcc.gov/guides/childrens-internet-protection-act>



RESOURCE DIRECTORY

- Cator, K. Dispelling Myths about Blocked Content. Transcript of interview.
Retrieved from <http://mindshift.kqed.org/2011/04/straight-from-the-doe-facts-about-blocking-sites-in-schools/>
- OnGuardOnline.gov. Practical tips from the federal government to help you be on guard against Internet fraud, secure your computer, and protect your personal information. Provides tips for educating about children's Internet safety. Retrieved from <http://www.ftc.gov/bcp/edu/microsites/onguard/>
- U.S. Department of Education. National Education Technology Plan 2010.
Retrieved from <http://www.ed.gov/technology/netp-2010>

Information on Digital Citizenship/Safety Education

- Common Sense Media. Free digital citizenship resources for educators.
Retrieved from <http://www.commonsensemedia.org/educators>
- iSafe. Subscription-based media literacy and digital citizenship education materials.
Retrieved from <http://www.isafe.org/>

Organizations

- American Association of School Administrators – <http://www.aasa.org/>
- Consortium for School Networking – <http://www.cosn.org/>
- Edutopia – <http://www.edutopia.org/>
- FrameWorks Institute – <http://www.frameworksinstitute.org/>
- Digital media & learning, John D. & Catherine T. MacArthur Foundation – http://www.macfound.org/site/c.1kLXJ8MQKrH/b.946881/k.B85/Domestic_Grantmaking_Digital_Media_Learning.htm
- Institute of Play – <http://www.instituteofplay.org/work/>
- National Association of Elementary School Principals – <http://www.naesp.org/>
- National Association of Secondary School Principals – <http://www.nasspconference.org/>
- National Education Association – <http://www.nea.org/>
- National School Boards Association – <http://www.nsba.org/>
- National Association of State Boards of Education – <http://www.nasbe.org>
- Partnership for 21st Century Skills – <http://www.p21.org/>
- Pew Research Center's Internet & American Life Project – <http://www.pewinternet.org/>
- State Educational Technology Directors Association – <http://www.setda.org/>

References

- Digital Youth Network. Retrieved from <http://www.digitalyouthnetwork.org/>
- Edutopia (March 2, 2009). Project-Based Learning Introduction Video.
Retrieved from <http://www.edutopia.org/project-based-learning-introduction-video>
- Federal Communications Commission (August 11, 2011). Schools and Libraries Universal Service Support Mechanism, a National Broadband Plan for Our Future, Report & Order.
Retrieved from http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0819/FCC-11-125A1.pdf
- Institute of Play. Projects. Retrieved from <http://www.instituteofplay.org/work/>
- Lenhart, A., Ling R., Campbell, S. Purcell, K. (April 10, 2010). Teens and Mobile Phones. Pew Research Center's Internet & American Life Project.
Retrieved from <http://www.pewinternet.org/Reports/2010/Teens-and-Mobile-Phones.aspx>
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., Rainie, L. (November 9, 2011). Teens, kindness and cruelty on social network sites.
Retrieved from <http://www.pewinternet.org/Reports/2011/Teens-and-social-media/Methodology.aspx?view=all>
- SmallLab Learning. Retrieved from <http://smallablearning.com/>
- The Field Museum. Conservation Connection.
Retrieved from <http://fieldmuseum.org/schools/conservation-connection>
- The Hive Learning Network NYC. Retrieved from <http://explorecreateshare.org/about/>
- U.S. Department of Education. Unpacking the Challenge.
Retrieved from <http://www.ed.gov/technology/netp-2010/unpacking-challenge>



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CoSN's Participatory Learning in Schools: Policy & Leadership initiative is based on the recognition that mobile devices and Web 2.0 tools provide powerful learning resources for our children and thus prepare them for the world beyond the classroom. The purpose of this initiative, which is sponsored by The Digital Media and Learning Initiative from The John D. and Catherine T. MacArthur Foundation is to assist schools to adapt to this new reality.



SAMPLE SCHOOL DISTRICT

SECTION: STUDENTS

TITLE: STUDENT PERSONAL
TECHNOLOGY USE

ADOPTED: July 21, 2012

REVISED:

237. STUDENT PERSONAL TECHNOLOGY USE

Section 1. Purpose

The Board recognizes the value of allowing students to use personal electronic devices in school to support educational goals and objectives. The Board has further determined that the presence of personal electronic devices may serve as a potential distraction.

Section 2. Authority

Therefore, the Board adopts this policy to establish reasonable rules and regulations to authorize students to possess personal electronic devices in school while ensuring the presence of these devices does not disrupt the educational environment or are used to distract, harass, and threaten other students and staff. The district reserves the right to restrict student use of district owned technologies and personally owned devices on school property or at school-sponsored events.

Section 3. Definitions

The following definitions shall apply for purposes of this policy:

Personal Electronic Device or **PED** is any electronic device owned by the student or his/her family that can take photographs; record audio or video data; store, transmit, receive or display voice, messages, data or images; or provide a wireless, unfiltered connection to the Internet. This definition includes, but is not limited to: cellular telephones, including smartphones; digital audio players (iPods or MP3 players); digital cameras, video/voice recorders; laptop computers; tablet computers (iPads, eReaders and similar devices); pagers/beepers; portable game players; radios; and/or any new technology developed with similar capabilities.

Use shall mean the following:

1. Carrying or possessing a PED that is either visible (regardless if it is “on” or “off”) or can be heard.
2. A PED that emits an audible signal, vibrates, is in “sleep mode,” displays a message or otherwise summons the device user. A PED in an “off” position and stored out-of-sight in a back pack, book bag, locker, purse, vehicle, etc. shall not be deemed “in use.”

Educational purposes include classroom activities, career development, communication with experts, homework, and limited high quality self-discovery activities. Students are expected to act responsibly and thoughtfully when using PEDs for educational purposes. Students bear the burden of responsibility to inquire with school administrators and/or teachers when they are unsure of the permissibility of a particular use of technology prior to engaging in the use.

Section 4. Guidelines

PEDs are permitted for use during the school day for educational purposes and/or in approved locations only.

The district shall not be liable for the loss, damage, misuse, theft of any personally owned device brought to school. This includes any financial charges that may result from overages to the student's/family's wireless data plan.

Student use of PEDs shall be subject to the following:

1. Before a student may use a PED in school, students must review this policy and have written consent from their parent(s)/guardian(s).
2. Student use of the school district's network (wired or wireless) indicates formal acceptance of the district's Acceptable Use Policy.
3. Students will only use appropriate technology at teachers' discretion.
4. Students will only use appropriate educational applications of their devices.
5. Students will refrain from calling, text messaging, emailing or electronically communicating with others from their PEDs, including other students, parents/guardians, friends and family except during allowable times.
6. Students not following expectations for use of PEDs will face disciplinary measures and lose the privilege to utilize PEDs in school for a period of time commensurate with the infraction.
7. Use of PEDs in locker rooms, restrooms, and nurses' offices are prohibited.
8. Students may not utilize any technology to harass, threaten, demean, humiliate, intimidate, embarrass, or annoy their classmates or others in the community. This is unacceptable student behavior known as cyberbullying and will not be tolerated.
9. PEDs used in school are not permitted to connect to personal 3G, 4G or other content service providers. PEDs are to connect to the Internet only via the district filtered wireless network. Any attempt to bypass the district's filtered network shall be considered a violation of this policy.

10. Permission to use a PED and to access the district's filtered wireless network with said device requires a completed permission form on file.

Privacy Concerns –

If school officials have reasonable suspicion that this policy, other relevant district policies, regulations, rules, procedures, and laws are being or have been violated by the student's use of a PED, and that the use of these devices materially and substantially disrupt the school's atmosphere, the devices may be searched in accordance with law, and/or the device(s) may be turned over to law enforcement, when warranted.

Students have no expectation of privacy in anything they create, store, send, receive or display on or over the district's WiFi network.

Consequences –

Violations of this policy by a student shall result in disciplinary action and may result in confiscation of the device.

Building principals, teachers and security personnel are authorized to confiscate a student's PED when used in violation of this policy. All confiscated PEDs shall be delivered to the building principal's office as soon as practical for return to student at the end of school day or the student's parent/guardian for a second or subsequent offense.

School administrators may impose additional disciplinary sanctions against students for policy violations, including suspensions from school or recommendations for expulsion from school as warranted by the facts and circumstances in a particular case.